



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,298	02/12/2004	Paul G. Conley	LINI 5666.4	5271

321 7590 12/29/2004

SENNIGER POWERS LEAVITT AND ROEDEL
ONE METROPOLITAN SQUARE
16TH FLOOR
ST LOUIS, MO 63102

EXAMINER

MCANULTY, TIMOTHY P

ART UNIT	PAPER NUMBER
----------	--------------

3682

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,298

Applicant(s)

CONLEY ET AL.

Examiner

Timothy P McAnulty

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-8 and 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotyk in view of Hennells.

Kotyk discloses in figure 3, a sealing apparatus 40,42 sealingly engaged with a pin 32 connected to a reciprocal piston 18 of a lubricant injector wherein an end of said pin engages a stop 16 limiting the stroke of said reciprocal piston; wherein said sealing apparatus includes a low pressure seal and an high pressure seal. Kotyk does not disclose said high pressure seal being a cup-shaped seal member having an annular shape. However, Hennells discloses in figure 1, a sealing assembly comprising a low pressure seal member 42 in press-fit sealing contact between a pin member 14 and a body member 11 having an opening and a high pressure seal member 51 in press-fit sealing contact between said pin member and said body member; wherein said low pressure seal member has a generally flat annular shape; and wherein said high pressure seal is a cup seal having an annular shape. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Kotyk in view of the teachings of Hennells to provide a cup-shaped annular high pressure seal so as to provide sufficient high pressure sealing of a piston element with suitable cycle life.

Regarding claim 10, Hennells discloses in lines 57 to 64 of column 6 a sealing ring made from polyurethane.

Art Unit: 3682

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kotyk in view of Hennells as applied to claims 1-8 and 10-16 above, and further in view of Valente.

The reference combination set forth above discloses the basic apparatus and further discloses that said low pressure seal member may be fabricated of any desirable flexible and compressible material but does not specifically disclose said low pressure seal member made from nylon. However, Valente teaches in the abstract, a sealing member in sealing contact between a pin member and a body member wherein said sealing member is made from nylon. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Kotyk in view of the teachings of Valente to provide said low pressure sealing member made from nylon so as to provide a hard but firmly resilient plastic sealing member.

Response to Arguments

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. Applicant asserts that because the cushioning washer 22 of Isenbarger is spaced away from the pin 10 and the housing 12, the cushioning washer is not in "sealing contact between the pin and the body." Such a limitation, namely "sealing contact" does not require press-fit contact (as is further evidenced by dependent claims 12, 15 and 16). A press-fit connection requires contact but does not necessarily constitute a seal or "sealing contact." However, because the limitation "sealing contact" includes the limitation "contact" the limitation is being construed to be so limited, i.e., "sealing contact" requires contact. Accordingly, in view of the above construction that "sealing contact" requires contact, the applied reference of Isenbarger does not specifically disclose said low pressure seal in contact (regardless of sealing) between said pin and said housing. As such, the previous rejection is withdrawn.

Art Unit: 3682


Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy P McAnulty whose telephone number is 703.308.8684. The examiner can normally be reached on Monday-Friday (7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on 703.308.3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


tpm


DAVID A. BUCCI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600